PhD Program Review – Summary Report Draft: May 5 2017; June 2 2017; June 10 2017; June 13 2017

Committee members:

- Joel Brockner
- Costis Maglaras (chair)
- Michel Pham
- Katherine Phillips (ex-officio)
- Andrea Prat
- Shiva Rajgopal
- Neng Wang
- Assaf Zeevi

Process: the committee was formed and met in the spring 2016. It reviewed basic information in the spring 2016, and held focus group discussions with groups of phd students, and, separately, with the divisional faculty phd coordinators. We then divided into 4 sub-committees focusing on:

1. Coursework: Neng, Costis

Peer review: Joel, Michel, Costis
Best practices: Assaf, Shiva, Costis
Economics phd track: Andrea, Costis

The subcommittees met during Fall 2016, and wrote short reports in Feb 2017. The committee met again Mar 2017 to agree on set of observations and proposals for the phd program.

The goal is to start implementing some of these proposals starting in the Fall 2017.

In addition, and to facilitate the above:

- a. Courses: we collected data for courses offered by the division, and as service courses; what courses are offered in peer institutions; evaluated the course portfolios that students take in various divisions.
- b. Peer schools: collected information -to the extent possible- for peer schools.
- c. Members of the committee met with phd student groups; and, separately, met with divisional faculty phd coordinators.
- d. Conducted online student and faculty surveys regarding the phd program.

Information for a)-d) are available for review.

Observations and Recommendations:

PhD coursework:

1. The current requirement of 20 courses seems high.

The committee recommends that students are allowed to count up to 4 research study courses towards their 20 course requirement. (For students that enter with an advanced degree and can reduce their nominal requirement down to 10 courses, perhaps we should allow them to count up to 2 research study courses towards their 10 course requirement.)

2. Student course portfolios in various divisions seem very heterogeneous and at times ad hoc, e.g., lacking a set of foundational courses.

Each division should create a course plan, appropriately differentiated given the research directions that students may follow in their dissertations. It should specify the relevant foundational (core) courses, plus suggested elective courses. This document should be updated if there are changes in the courses that are offered and communicated to students every year (mid to late August).

3. In most divisions students are concerned that they do not get the opportunity to take advanced phd research seminars from faculty in the divisions.

The committee recommends that each division makes an effort to add 1 more full semester phd seminar, or 2 half semester phd seminars in each academic year. These courses could be paid as ad comp instead of teaching credit. In divisions where there is a large number of phd courses offered annually (Finance) or divisions where phd courses are routinely offered with few registered students, the committee suggests that 1 or 2 of these courses would be offered every other year, thus creating capacity for advanced (rotating) phd seminars to be offered.

4. Breadth course requirement.

The committee recommends that we add a 1 course breadth requirement for each student to take as part of their course requirement 1 phd course from another division (that the students would not nominally take... e.g., many students take the Microeconomics course sequence, but that should not be counted as the breadth requirement).

Additional remarks:

5. Junior faculty involved in phd teaching.

In several divisions, junior faculty do not teach phd courses (core or advanced seminars). The senior faculty in each division should make an effort for junior faculty to, if interested, teach advanced research seminars in their areas of interest. Perhaps by allowing or facilitating the junior faculty to teach a half semester course, or supporting senior/junior co-teaching of phd courses.

6. Computing/programming skills: we recommend that the phd program organizes and offers a programming / data analysis course. This could be either a full semester course or a 1 week workshop, annually (or every other year), on python, web scrapping, and related tools. The

course should focus on the programming aspects as opposed to methodological fundamentals that should be assumed known or that they can be taken from other courses (there are several such courses for people at different levels of statistics, linear algebra, probability and optimization).

Peer-school review and associated proposals:

The committee examined peer schools and observed a) that several of our peers place higher emphasis on professional development initiatives (e.g., teaching, communication, etc.), and b) they admit a higher % of US applicants.

7. Professional development:

We recommend that the PhD office offers annually a set of courses:

- Writing workshop
- a. (for credit ~1/2 course) Communications workshop and 1-1 presentation coaching
- b. Teaching workshop / case discussion
- c. (for credit ~1/2 course) Pro-seminar: "Preparing for an academic career" -- sequence of 12 lunch seminars with a collection of faculty across divisions discussing: job search; start of academic career; research agenda; publication process; tenure; ...

The recommendation is that a)-c) are mandatory through their phd studies, with preference for the students to take these in years 3-4 of their studies; b) possibly in year 5.

8. Exposure to MBA curriculum:

Offer a 5-day MBA overview (ala Samberg "core" day), where each core course is covered in 3hr session by a faculty member or a senior phd student that has TA'd the respective course; this should cover the basic concepts, and go through examples of lectures, e.g., a case, and provide some background references, as needed. Presenters can get compensated for their preparation and teaching.

9. PhD student elected faculty award that rewards each year 1 faculty member for their service to the phd program, through teaching, advising, etc. (Stanford model. "PhD Faculty Distinguished Service Award")

Additional comments:

- Funding for the phd program is again becoming non-competitive. This is something that we may need to review and revise soon as our stipends are falling behind viz Booth, Stanford.

Best practices:

10. Annual student feedback:

Each division should provide written feedback to each doctoral student -- this could be short, but should capture the summarized comments and progress assessment, and recommendations for the next year(s). These written reports should be shared with the PhD office, and should be communicated to the students and shared for archiving with the phd office by the end of the summer semester of each academic year.

11. Divisional phd program handbook:

Each division should have a clear, written and communicated handbook for the students. Most divisions have these written documents, and samples can be shared. These divisional doctoral program handbook should adhere to and subsum the original milestones document adopted in 2011-2012, appropriately adapted to divisional practices. The document should also include information about suggested course plans; courses that could be taken in other divisions/departments/schools; etc.

12. Research in years 1-2, and

Students should engage in a summer research project at the end of their first year in the program. This should be advised by a division member. Students should be required to give a short (20 min) presentation to their division (students and faculty) in the Fall of year 2. [This has been agreed upon by the divisions back in 2012, but has not been adapted throughout the school.]

Students should engage in research in year 2, at a minimum at the level of taking 1 research independent study course during the Fall or Spring semester.

13. Seminars:

- a. Student run brown bag seminars: funding provided for lunch per division from the phd office budget. 2 students to present 20-30 min each. Faculty should ideally participate. Each student should present 2-3 times inthat seminar starting with year 1 summer research.
- b. Students should be allowed and, in fact, required to attend faculty research seminars. [one idea is the following: we take student attendance

14. TAships:

Divisions with the help of the phd office should enforce the upper bounds on how many TA assignments can phd students take as a function of their year of study. This was approved in 2012 but never implemented.

 The divisional administrative coordinator and the phd office should maintain a running tally of how many TA appointments per student, per year. OSA will not be allowed to process payment above each student's quota.

15. Admissions & placement:

Each division should consider whether more emphasis on recruiting US applicants would be beneficial to their own part of the program (in terms of culture and placement), and, if so, what

steps could be taken to increase the number of strong US applicants. We also suggest that divisions continue to make efforts to ensure that phd student placement priorities be set in academia.

16. PhD student club:

The phd office will provide funding to create a school-wide PhD student club that could be used to promote social and academic activities.

Evaluation / program review:

- 17. The phd program (school and divisional programs) should be reviewed every 5 years.
 - Courses
 - Admissions
 - Placement
 - Best practices

Economics division phd:

- 16. Several members of the new Economics division have expressed interest in getting involved with advising doctoral students, teaching doctoral courses, and in general starting a phd program at the business school in Economics.
- The committee discussed the general case for the program but not how exactly it will be funded, as that is outside the scope of the committee.
- The committee is supportive of the idea in principle and sees it as part of a strategy to maintain a develop a strong research environment in the future Economics (Sub)Division.
- The committee also made some other observations:
 - a. The committee is more supportive of the HBS model (joint, as part of the Econ program in A&S) than of the Stanford model (separate program housed at GSB). The Econ division should not try to develop its own independent program, but to join forces with the Department of Economics.
 - b. Before the move to Manhattanville the number of phd cubicles will also be a constraint to be taken into account.
 - c. The committee identified a number of issues to be studied in more depth, such as: (i) In a joint program with the Department of Economics, how will students be allocated to the two sides? (ii) How will we communicate to the external world that this is a joint program (eg joint website)? (iii) how many new courses will be created and how will they be resourced/staffed?

<u>Implementation of proposals:</u>

- A. Divisional phd program coordinators should be responsible for the implementation of the various proposals, with the aid of the divisional administrative support.
- B. The staff at the PhD office should be responsible for a) providing needed information, b) appropriate reminders for the various milestones per division and per student, and c) archive the information.
- C. Liz Elam to schedule and meet with each divisional phd faculty coordinator once per quarter.
- D. The Director of the PhD program should meet annually with each division to review their respective program, issues/challenges/changes, and to also review routine issues such as student progress, placement, admissions, course portfolio, and the extent to which junior faculty are involved in offering phd courses. To the extent possible, faculty that teach in the phd program should also be willing and get involved in advising doctoral students.
- E. Annual reporting:
 - i. Each division should submit to the phd program director, with an archival copy to the phd office, an annual report. This should be short, and should be due at the end of the summer semester. It should report on the basic activities and progress of the divisional program:
 - Admissions
 - Placement of graduating students
 - Studend progress, specifically highlighting issues that may be arising; students that are being asked to leave the program; students not graduating in year 5
 - Courses offered; any commentary
 - Adviser involvement
 - Copy of annual student feedback; explanation if missing
 - Any new initiatives for this past and next year
 - ii. The PhD program director should assemble and report on the program to the EC in the Fall of each year. This could be a 1-2 page "state of the program." document.
- F. The Economics Division should continue to work toward a proposal for the Economics PhD Program to be considered by the Executive Committee.